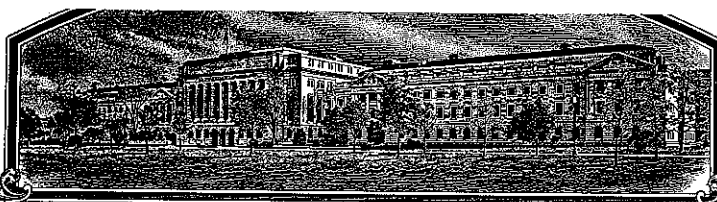


No.

200400122



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Harris Moran Seed Company

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE FOREGOING PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

BEAN, GARDEN

'Navarro'

In Testimony Whereof, I have herunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this third day of May, in the year two thousand and seven.

Attest:

Alm Zeller

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Robinson

Secretary

REPRODUCE LOCALLY. Include form number and date on all reproductions.

Form Approved - OMB No. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICEAPPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE
(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.


Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2429).

1. NAME OF OWNER Harris Moran Seed Company		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME FM 184	3. VARIETY NAME Navarro
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) 555 Codoni Ave Modesto, CA 95357 USA		5. TELEPHONE (include area code) (209) 579-7333	FOR OFFICIAL USE ONLY PVPO NUMBER 2004 00 122 FILING DATE 2/26/2004
		6. FAX (include area code) (209) 527-8754	
7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) corporation	8. IF INCORPORATED, GIVE STATE OF INCORPORATION CA	9. DATE OF INCORPORATION 4-7-1969	
10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers) John Schoenecker P.O. Box 4938 Modesto, CA 95352-4938			F E E S \$ 3652.00 DATE 2/24/2004 CERTIFICATION FEE \$ 768.00 DATE 4/17/2007
11. TELEPHONE (include area code) (209) 549-5203	12. FAX (include area code) (209) 548-9975	13. E-MAIL j.schoenecker@harris Moran.com	
14. CROP KIND (Common Name) Garden Bean	16. FAMILY NAME (Botanical) Leguminosae	18. DOES THE VARIETY CONTAIN ANY TRANSGENES? (OPTIONAL) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF SO, PLEASE GIVE THE ASSIGNED USDA-APHIS REFERENCE NUMBER FOR THE APPROVED PETITION TO DEREGULATE THE GENETICALLY MODIFIED PLANT FOR COMMERCIALIZATION.	
15. GENUS AND SPECIES NAME OF CROP Phaseolus vulgaris	17. IS THE VARIETY A FIRST GENERATION HYBRID? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? (See Section 63(a) of the Plant Variety Protection Act) <input type="checkbox"/> YES (If "yes", answer items 21 and 22 below) <input checked="" type="checkbox"/> NO (If "no", go to item 23)	
19. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse) a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of Variety d. <input type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional) e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Owner's Ownership f. <input checked="" type="checkbox"/> Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository) g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$3,652), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office)		21. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES? <input type="checkbox"/> YES <input type="checkbox"/> NO IF YES, WHICH CLASSES? <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED	
23. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.)		22. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input type="checkbox"/> YES <input type="checkbox"/> NO IF YES, SPECIFY THE NUMBER 1,2,3, etc. FOR EACH CLASS. <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED (If additional explanation is necessary, please use the space indicated on the reverse.)	
24. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.)			

25. The owners declare that a viable sample of basic seed of the variety has been furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.

The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Owner(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF OWNER 		SIGNATURE OF OWNER	
NAME (Please print or type) John Schoenecker, Harris Moran Seed Co		NAME (Please print or type)	
CAPACITY OR TITLE Dir. of Legal & Regulatory	DATE 2/24/04	CAPACITY OR TITLE	DATE

(See reverse for instructions and information collection burden statement)

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), **ALL** of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (*in the sense that it will reproduce an entire plant*) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$3,652 (\$432 filing fee and \$3,220 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfilled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. **DO NOT** use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$432 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office

Telephone: (301) 504-5518

FAX: (301) 504-5291

Homepage: <http://www.ams.usda.gov/science/pvpo/pvp.htm>

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority and provide evidence that name has been cleared by the appropriate recognized authority before the Certificate of Protection is issued. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, 10301 Baltimore Avenue, Suite 401 NAL Building, Beltsville, MD 20705. Telephone: (301) 504-5682 <http://www.ams.usda.gov/lsg/seed.htm>.

ITEM

- 19a. Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
(2) the details of subsequent stages of selection and multiplication;
(3) evidence of uniformity and stability; and
(4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 19b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
(1) identify these varieties and state all differences objectively;
(2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
(3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 19c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 19d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 19e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
20. If "Yes" is specified (*seed of this variety be sold by variety name only, as a class of certified seed*), the applicant **MAY NOT** reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See *Regulations and Rules of Practice, Section 97.103*).
23. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
24. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.

22. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)

23. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

March 2003

24. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. The fees for filing a change of address; owner's representative; ownership or assignment; or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

Variety: Navarro

Exhibit A: Origin and Breeding History

The original cross **1C-X3374** was made in the greenhouse at San Juan Bautista, CA in the Fall of 1990. The parents were F₅ selections from a cross 1C-X2490 between Boyo and Primo (FM 168). The female of **1C-X3374** was 1C-X2490-MsMs(W)A(C)4 and the male was 1C-X2490-MsMs(W)W(C)1.

The F₁ seed was planted in the greenhouse in San Juan Bautista in the Spring of 1991. The seed was harvested bulked and given the designation **1C-X3374-Ms**.

Fifty of the F₂ seed were planted in the field at Sun Prairie, WI in the Summer of 1991. Three plants were selected for high yield, slightly darker pod color, and the most upright plant habit. The seed was bulked and designated **1C-X3374-Ms(W)Ms**.

Fifty of the F₃ seeds were planted in the field at San Juan Bautista in the Summer of 1992. Six single plant selections were made with high yield, slightly darker pod color, and the most upright plant habit. The six selections were designated **1C-X3374-Ms(W)Ms(C)A to F**.

Progeny rows of the F₄ seeds were planted in the field at Sun Prairie in the Summer of 1993. The fifth row was selected as the best progeny row based on yield and pod color. The seed from the row was bulked and designated **1C-X3374-Ms(W)Ms(C)E(W)Ms**.

Twenty of the F₅ seeds were planted in the greenhouse at San Juan Bautista in the Fall of 1993. The plants were inoculated with Bean Common Mosaic Virus. Six plants were saved, the seed was bulked and designated **1C-X3374-Ms(W)Ms(C)E(W)Ms(MT)Ms**.

The F₆ seed was planted in the field at San Juan Bautista in the Summer of 1994. The seed was bulked and designated **1C-X3374-Ms(W)Ms(C)E(W)Ms(MT)Ms(C)Ms**.

The F₇ seed was evaluated in 2 yield trials at Sun Prairie in the Summer of 1995. The line was rated high for yield and darker pod color than Primo. It was decided to advance the line. F₇ seed was also planted in the field at San Juan Bautista. The seed from San Juan Bautista was bulked and designated **FM 184**.

FM 184 was planted in replicated yield trials at Sun Prairie, WI in the Summer of 1996. It rated higher for yield and pod color compared to Roma II and Primo. Four plants with the highest yield were saved from row number W64678. The plants were designated **FM 184 A to D**.

Thirty seed from each plant were planted in the greenhouse in Sun Prairie in the Spring of 2000. The seed from each plant was kept separate. Thirty plants were harvested from FM 184 A and designated **FM 184 A1 to 30**, twenty seven plants were harvested from FM 184 B and designated **FM 184 B1 to 27**, twenty plants were harvested from FM 184 C

and designated **FM 184 C1 to 20**, and twenty nine plants were harvested from FM 184 D and designated **FM 184 D1 to 29**.

Fifty seed of each of the 97 plants were planted in progeny rows at San Juan Bautista in the Summer of 2000. The rows were evaluated for uniformity and off-types. All rows were uniform and no off-types or variants were found. The seed was bulked and designated **FM 184 C94410+**.

One acre of the seed was planted in Twin Falls, ID in the summer of 2001. The field was rouged, no off-types or variants were found. The seed was harvested as a bulk. Ten acres of seed was planted in Twin Falls in the summer of 1992. Zero off-types and variants were found in 1200 plants. The seed was harvested and the variety was named **Navarro**.

Navarro has been observed for 3 generations of seed increase. **Navarro** is stable and uniform. No variants were observed.

The parentage of 'Boyo', traceable to public varieties, is unknown.
(Per letter of March 15, 2007) mmt 3/26/2007

Variety: Navarro

Exhibit B

Statement of Distinctness

Navarro is most similar to the variety **Primo**; however, **Navarro** has the CO-1 gene conferring resistance to *Colletotrichum lindemuthianum* race 73 (Anthracnose), whereas **Primo** lacks the gene and is susceptible.

The resistance has been confirmed in pathology tests conducted in Davis, Ca and Sun Prairie, WI. The tests were conducted in January 2004.

OBJECTIVE DESCRIPTION OF VARIETY
 GARDEN BEAN (*Phaseolus vulgaris* L.)

NAME OF APPLICANT(S) Harris Moran	FOR OFFICIAL USE ONLY
ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code)	PVPO NUMBER 2004 00 122
	VARIETY NAME Navarro
	TEMPORARY OR EXPERIMENTAL DESIGNATION FM 184

PLEASE READ ALL INSTRUCTIONS CAREFULLY: Place the appropriate number that describes the varietal character of this variety in the boxes below. Place a zero in the first box (e.g., or) when number is either 99 or less or 9 or less respectively. Data for quantitative plant characters should be based on a minimum of 100 plants. Comparative data should be determined from varieties entered in the same trial. Measured data should be for SPACED PLANTS. Ranges should also be given. Royal Horticultural Society or any recognized color standard may be used to determine plant colors; designate system used: Please answer all questions for your variety; lack of response may delay progress of your application.

TYPE:

4

1 = Garden 2 = Snap 3 = Flageolet 4 = Romano

MARKET MATURITY:

5 **3**

Days to edible pods

Comparison varieties

1 = 'Tendercrop'

2 = 'Kentucky Wonder'

3 = 'Goldrush'

4 = 'Slenderette'

5 = 'Gitana'

6 = 'Provider'

7 = 'Bush Blue Lake 290' 8 = Other (specify below)

Primo

Heat units to edible pods

Number of days earlier than

Same number of days as **8**

Number of days later than

PLANT:

0 **8**

cm Spacing between plants in a row

1

Habit

1 = Determinate

2 = Indeterminate, erect stem and branches

3 = Indeterminate with weak and prostrate stem and branches

4 = Indeterminate climbing habit with weak, long and twisted stem and branches

0 **4** **0**

cm Height

cm Shorter than

Same height as

1 **0**

cm Taller than

4 **0**

cm Spread

cm Narrower than

Same width as

1 **0**

cm Wider than

8

3

8

3

Use Comparison Varieties from Section 2.

Please make all 3 comparisons for Height and Spread.

3. PLANT: (continued)

2004 00 122

☒ 3

Pod position 1=Low 2=High 3=Scattered

☒ 3

Bush form (illustrated below)



1=Spherical bush form



2=Stem bush form



3=Wide bush form



4=High bush form

5=Other (SPECIFY) _____

4. LEAVES:

☐ 1

Surface: 1=Dull 2=Glossy 3=Intermediate

☐ 2

Size: 1=Small ('Gitana') 2=Medium 3=Large ('Tendercrop')

☐ 2

Color: 1=Light green (as light or lighter than 'Goldrush')
2=Medium green
3=Dark green (as dark or darker than 'Bush Blue Lake 290')

5. ANTHOCYANIN PIGMENT:

1=Absent 2=Present

☐ 1

Flowers

☐ 1

Stems

☐ 1

Pods

☐ 1

Seeds

☐ 1

Leaves

☐ 1

Petioles

☐ 1

Peduncles

☐ 1

Nodes

6. FLOWER COLOR AND DAYS TO BLOOM:

☐ 1

Color of standard

☐ 1

Color of wings

☐ 1

Color of Keel

☐ 1

Days to 50% bloom

Flower Color Choices

1=White 2=Cream
3=Pink 4=Lilac
5=Purple 6=Blue
7=Other (SPECIFY) _____

7. PODS (edible maturity):

☒ 2

Exterior color (fresh)

1=Light green (as light or lighter than 'Provider')
2=Medium green
3=Dark green (as dark or darker than 'Bush Blue Lake 290')
4=Yellow ('Goldrush')
5=Green-red variegated (horticultural)
6=Other (SPECIFY) _____

☐ 1

Processed pods (exterior color)

1=Light ('Tendercrop') 2=Dark ('Bush Blue Lake 290')

☐ 1

Dry pod color

1=Buckskin ('Sprite') 2=Green, persistent chlorophyll ('Hystyle')

2004 00 122

- ☐ ☐ Cross section pod shape (middle of the pod) 1=Flat 2=Heart (Pear) 3=Round 4=Figure eight
- ☐ Creaseback 1=Present 2=Absent
- ☐ Pubescence 1=None ('Slenderette') 2=Sparse 3=Considerable ('Provider' or 'Sprite')
- ☐ Constriction (Interlocular cavitation) 1=None 2=Slight 3=Deep
- ☐ ☐ mm Spur length
- ☐ Fiber 1=None ('Bush Blue Lake 290') 2=Sparse 3=Considerable ('Sprite')
- ☐ Number of seeds per pod
- ☐ Suture string 1=Present 2=Absent
- ☐ Seed development 1=Slow ('Bush Blue Lake 290') 2=Medium 3=Fast ('Provider')
- ☐ Machine harvest 1=Adapted 2=Not adapted

Percent sieve size distribution at optimum maturity for non-flat pods

4.76 to 5.76mm	5.76 to 7.34mm	7.34 to 8.34mm	8.34 to 9.53mm	9.53 to 10.72mm	≥ 10.72mm
%	%	%	40 %	60 %	%

3 Sieve	<input type="checkbox"/> <input type="checkbox"/>	cm length	<input type="checkbox"/> <input type="checkbox"/>	mm width	<input type="checkbox"/> <input type="checkbox"/>	total mm thickness
4 Sieve	<input type="checkbox"/> <input type="checkbox"/>	cm length	<input type="checkbox"/> <input type="checkbox"/>	mm width	<input type="checkbox"/> <input type="checkbox"/>	total mm thickness
5 Sieve	<input type="checkbox"/> <input type="checkbox"/>	cm length	<input type="checkbox"/> <input type="checkbox"/>	mm width	<input type="checkbox"/> <input type="checkbox"/>	total mm thickness
6 Sieve	<input type="checkbox"/> <input type="checkbox"/>	cm length	<input type="checkbox"/> <input type="checkbox"/>	mm width	<input type="checkbox"/> <input type="checkbox"/>	total mm thickness

SEED COLOR:

- ☐ Seedcoat luster 1=Shiny 2=Dull 3=Semishiny 4=Variable
- ☐ Seedcoat 1=Monochrome 2=Polychrome
- ☐☐ Primary color 1=White 2=Yellow 3=Buff 4=Tan 5=Brown 6=Pink 7=Red 8=Purple 9=Blue 10=Black 11=Other (SPECIFY)
- ☐☐ Secondary color 1=White 2=Yellow 3=Buff 4=Tan 5=Brown 6=Pink 7=Red 8=Purple 9=Blue 10=Black 11=Other (SPECIFY)
- ☐ Seedcoat pattern 1=Solid 2=Splashed 3=Mottled 4=Striped 5=Flecked 6=Dotted
- ☐ Hilal ring 1=Absent 2=Present
- ☐☐ Hilal Ring Color 1=White 2=Yellow 3=Buff 4=Tan 5=Brown 6=Pink 7=Red 8=Purple 9=Blue 10=Black 11=Other (SPECIFY)

9. SEED SHAPE AND SIZE:

2004 00 122

☒ 2

Hilum view



1=Elliptical



2=Oval



3=Round

☒ 2

Cross section

1=Elliptical

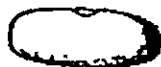
2=Oval

3=Cordate

4=Round

☒ 1

Side view



1=Oval to Oblong



2=Round



3=Reniform

☒ 39

gm/100 Seed

☒ 02

gm/100 Seed lighter than

gm/100 Seed same as

☒ 110

gm/100 Seed heavier than

☒ 8

☐

☒ 3

Use Comparison Varieties from Section 2.

Please make all 3 comparisons.

10. DISEASE RESISTANCE:

0 = Not Tested

1 = Susceptible

2 = Resistant

3 = Intermediate

4 = Tolerant

PLEASE SPECIFY RACE OR STRAIN WHERE APPROPRIATE

☐

Anthraxnose (*Colletotrichum lindemuthianum*)

☐

Race Alpha

☐

Race Beta

☐

Race Gamma

☐

Race Delta

☐

Race Epsilon

☐

Race Lambda

☐

Race Kappa

☒ 2

specify race 73

☐

Bean Rust (*Uromyces appendiculatus*)

☒ 1

Race 38

☐ 0

Race 39

☐ 0

Race 40

☐ 0

Race 44

☐ 0

Race 45

☐ 0

Race 46

☐ 0

Race 49

☐ 0

Race 50

☐ 0

Race 51

☐ 0

Race 52

☒ 1

Race 54

☐ 0

Race 56

☐ 0

Race 59

☒ 1

specify race

72

☐ 0

Powdery Mildew (*Erysiphe polygoni*)

☐ 0

Fusarium Root Rot (*Fusarium solani* L. sp. *phaseoli*)

☐ 0

Pythium Root Rot (*Pythium* spp.)

☒ 1

Aphanomyces Root Rot (*Aphanomyces euteiches*)

☐ 0

Rhizoctonia Root Rot (*Rhizoctonia solani*)

☐ 0

Pythium Blight or Aerial Pythium (*Pythium ultimum*)

☐ 0

Angular Leaf Spot (*Isariopsis griseola*)

☐ 0

Bacterial Wilt (*Corynebacterium flaccumfaciens* subsp. *flaccumfaciens*)

0. DISEASE RESISTANCE: (continued)

Exhibit C (Garden Bean) Page 5

2004 00 122

☒ 4Bacterial Brown Spot (*Pseudomonas syringae* pv. *syringae*)☒ 1Common Bacterial Blight (*Xanthomonas campestris* pv. *phaseoli*)☒ 1Halo blight (*Pseudomonas syringae* pv. *phaseolicola*)☒ 1

Race 1

☒ 1

Race 2

☐

Other (SPECIFY)

☒ 0

Clover Yellow Vein Virus (CYVV)

☐

Bean Common Mosaic Virus (BCMV)

☒ 2

BV1

☒ 2

NY15

☐ 0

NL2

☒ 1

NL3

☐ 0

NL4

☐ 0

NL8

☐ 0

Florida

☐ 0

Idaho

☐ 0

Mexican

☐ 0

Western

☐

Type

☐

Other (SPECIFY)

☒ 1

Yellow Bean Mosaic Virus (BYMV)

☒ 1

Curly Top Virus (BCTV)

☐

Other (Specify Disease and Race or Strain)

INSECT RESISTANCE:

0 = Not Tested

1 = Susceptible

2 = Resistant

3 = Intermediate

4 = Tolerant

☐ 0

Aphid

☐ 0

Root Knot Nematode

☐ 0

Leafhopper

☐ 0

Seed Corn Maggot

☐ 0

Lygus

☐ 0

Thrips

☐ 0

Pod Borer

☐ 0

Weevils

☐

Other (SPECIFY)

PHYSIOLOGICAL RESISTANCE:

0 = Not Tested

1 = Susceptible

2 = Resistant

3 = Intermediate

4 =

lerant

☐ 0

Heat

☐ 0

Cold

☐ 0

Drought

☐ 0

Air Pollution

☐ 0

Ozone

☐ 0

Other (SPECIFY)

COMMENTS:

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). The information is held confidential until the certificate is issued (7 U.S.C. 2426).

EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

1. NAME OF APPLICANT(S) Harris Moran Seed Company	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER FM 184	3. VARIETY NAME Navarro
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country) 555 Codoni Ave Modesto, CA 95357 USA	5. TELEPHONE (Include area code) (209) 579-7333	6. FAX (Include area code) (209) 527-5312
	7. PVPO NUMBER 2004 00 122	

8. Does the applicant own all rights to the variety? Mark an "X" in the appropriate block. If no, please explain. ☒ YES ☐ NO

9. Is the applicant (individual or company) a U.S. national or a U.S. based company? If no, give name of country. ☒ YES ☐ NO

10. Is the applicant the original owner? ☒ YES ☐ NO If no, please answer one of the following:

a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. National(s)?

☐ YES ☐ NO If no, give name of country

b. If the original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company?

☐ YES ☐ NO If no, give name of country

11. Additional explanation on ownership (Trace ownership from original breeder to current owner. Use the reverse for extra space if needed):

PLEASE NOTE:

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 0.1 hour per response, including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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